

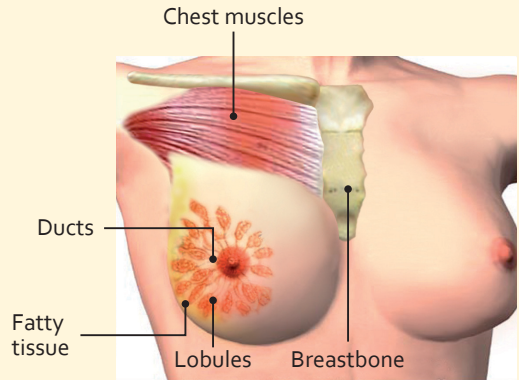


Breast Cancer

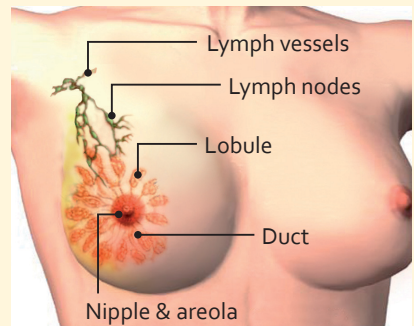


What is the Breast?

Each breast has 6-9 overlapping sections called lobes. Each lobe comprises many smaller lobules, which ends in dozens of tiny bulbs that can produce milk. Thin tubes, called ducts, link all the lobes, lobules, and bulbs. These ducts lead to the nipple in the centre of a dark area of skin called the areola. Fat fills the spaces around the lobules and ducts. There are no muscles in the breast, but muscles lie under each breast and cover the ribs.



Each breast contains blood vessels and vessels that carry colourless fluid called lymph. The lymph vessels lead to small bean-shaped structures called lymph nodes. Clusters of lymph nodes are found in the axilla (under the arm), above the collarbone and in the chest. Lymph nodes are also found in many other parts of the body.



What is Breast Cancer?

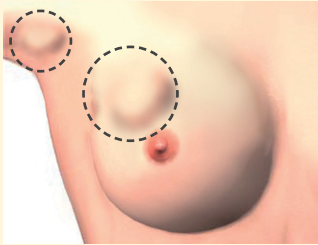
Breast cancer means that some cells in the breast are growing abnormally. Cancer cells differ from normal cells in several ways. They divide and grow quickly and invade surrounding tissues.

What are the Symptoms of Breast Cancer?

Early breast cancer usually does not cause pain. When breast cancer first develops, there may be no symptoms at all. As the cancer grows, it may give rise to:

1. A lump or thickening in the breast or in the underarm area
2. A change in the size or shape of the breast
3. Discharge or bleeding from the nipple
4. A change in the colour or feel of the skin of the breast, areola or nipple (dimpled, puckered or scaly)
5. Recent retraction (pulling in) of the nipple

Consult a doctor if any of these changes are noted.



Lump in breast or underarm area



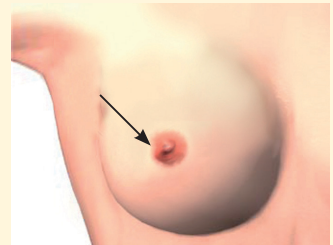
Change in size or shape of breast



Discharge or bleeding from the nipple



Change in colour or appearance of breast skin or areola



Nipple pulled into areola

How is Breast Cancer Diagnosed?

Cancer of the breast can be diagnosed by:

Medical History

A medical history helps your doctor to assess your risk of cancer. Your doctor will ask you for your family history of breast cancer, your menstrual history and the physical characteristics of your breast lump.

Palpation of a Breast Lump

Your doctor will perform a physical examination of your breast to detect the location, size and general condition of your breast lump and lymph nodes.

Mammogram

Your doctor may request for you to go for a mammogram. This is an X-ray of the breast and is the most helpful technique for detecting breast cancer that are too small to be felt. A plate-like device is used to flatten your breast to provide a clear image of the breast. The mammogram can give the doctor important information about a breast lump. If an area on the mammogram looks suspicious or is not clear, additional X-rays may be needed.

Ultrasound

An ultrasound of the breast uses high-frequency sound waves to show whether a breast lump is solid or filled with fluid. This examination may be done together with mammography.

Needle Biopsy

Your doctor uses a fine needle to remove some cells from a breast lump and examines them under a microscope to check for the presence of cancer cells. Sometimes a larger needle may be used to remove a core tissue from a solid lump.

Types of Breast Cancer

There are several types of breast cancer. The most common types include:

1. Ductal Carcinoma

This is the most common type of breast cancer. It begins in the lining of the ducts.

2. Lobular Carcinoma

This cancer arises from the lobules.

3. Metastatic Breast Cancer

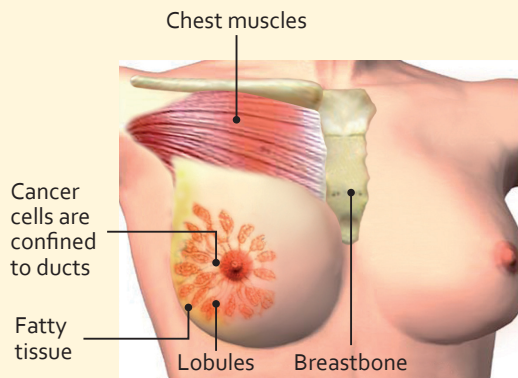
When breast cancer spreads outside the breast, cancer cells are often found in the lymph nodes under the arm (axillary lymph nodes). If the cancer has reached these nodes, it may mean that cancer cells have spread to other parts of the body, other lymph nodes and other organs, such as, the bones, liver or lungs. When breast cancer spreads, it is called metastatic breast cancer.

Stages of Breast Cancer

The 5 stages of breast cancer are:

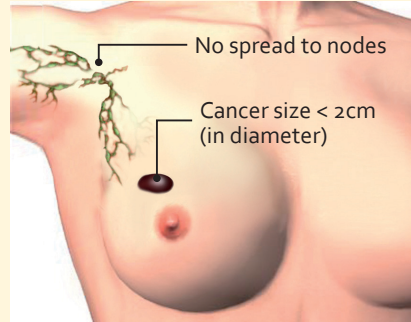
1. Stage 0

Stage 0 means that the cancer cells are confined within the ducts in the breast and have not had a chance to spread.



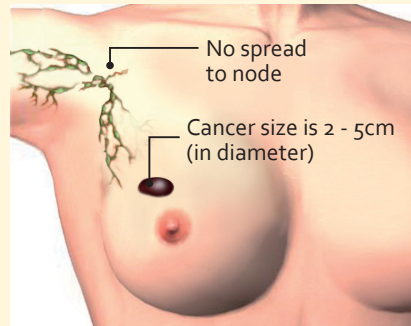
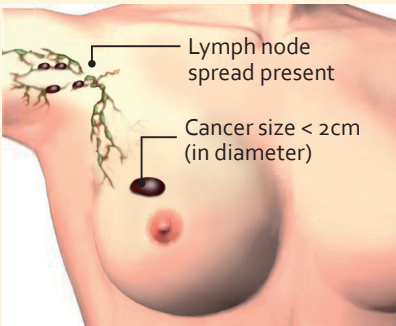
2. Stage I

The cancer cells have not spread beyond the breast and is not more than 2.0 cm (in diameter).



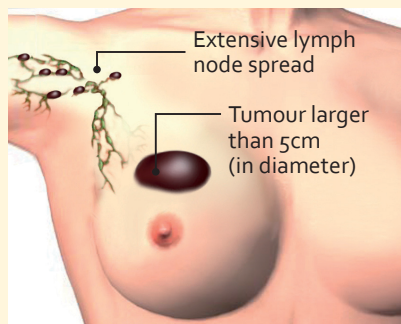
3. Stage II

The cancer has spread to the underarm lymph nodes and/or the cancer in the breast is between 2-5cm (in diameter).



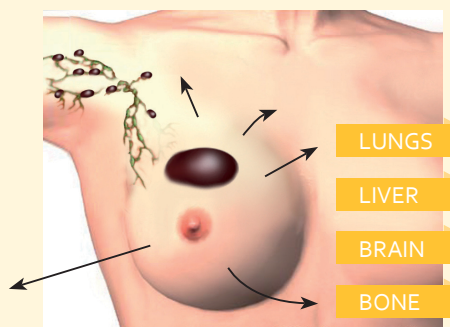
4. Stage III

Stage III is also called locally advanced cancer. The cancer in the breast is more than 5cm (in diameter) or has involved the chest wall or overlying skin. The cancer extends to the underarm lymph nodes.



5. Stage IV

Stage IV is metastatic cancer. The cancer has spread from the breast to other organs of the body, such as the lungs, liver, brain and bone, including other lymph node groups.



METASTATIC:
Cancer has spread to other organs in the body

Recurrent Cancer

Recurrent cancer means that the cancer recurred in spite of the initial treatment. Even when the cancer in the breast seemed to have been completely removed or destroyed, the cancer sometimes recur. This is because undetected cancer cells may remain in the area after treatment or because the disease has already spread before commencement of treatment.

What is the Treatment for Breast Cancer?

Treatment of breast cancer depends on the stage or extent of the disease. This depends on the size, characteristics and location of the cancer and the involvement of the axillary lymph nodes. Treatment may be local or systemic. A patient may require only local or a combination of local and systemic treatment. Your doctor will discuss your treatment plan with you.

Local Treatment

Local treatment is to remove, destroy or control the cancer cells in the breast. Surgery and radiation therapy are local treatments.

Surgery

Surgery is the standard treatment for breast cancer. The doctor will explain the benefits, risks and expected outcomes of the surgery.

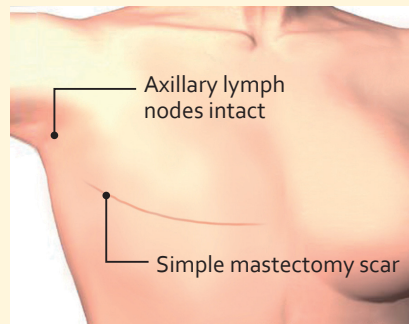
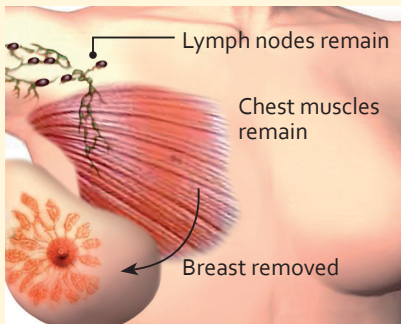
Types of Surgeries

a. Wide Excision

Wide excision is a procedure that removes the cancerous lump and some of the surrounding breast tissue, but leaves the rest of the breast intact.

b. Mastectomy

A mastectomy is the surgical removal of the whole breast. Axillary clearance surgery involves removal of the lymph nodes in the armpit near the breast. As a standard treatment, usually a mastectomy and axillary clearance surgery are performed at the same time.



Axillary Clearance/ Axillary Sampling

This involves removing some of the axillary lymph nodes under the arm of the affected side regardless of whether wide excision or mastectomy is performed. This procedure does not affect the strength or the movement of the arm.

Breast Reconstruction Surgery

Breast reconstruction surgery can be done to re-create the shape of a breast in patients who undergo mastectomy using an implant or the patient's own tissue. It can be done at the time of the breast surgery or as a separate operation, a few months to years later. It does not affect the outcome of breast cancer treatment as its main purpose is to enhance a patient's body image after mastectomy.

Radiation Therapy

Radiation therapy (also called radiotherapy) is the use of high-energy x-rays to damage cancer cells and stop them from growing. The rays usually come from radioactive material outside the body and are directed at the breast by a machine (external radiation). Radiation therapy is almost always given in combination with wide excision but may not be required after mastectomy.

Systemic Treatment

Systemic treatment include:

1. Chemotherapy

Chemotherapy is the use of drugs to kill cancer cells. Chemotherapy for breast cancer usually uses a combination of drugs. These drugs are usually given by injection. Chemotherapy is a systemic therapy because the drugs enter the bloodstream and travel throughout the body. Chemotherapy is given in cycles: a treatment period followed by a recovery period, then another treatment, and so on. Common side effects include hair loss and nausea. However they are temporary and may vary from individual to individual.

2. Endocrine Therapy

Endocrine therapy is used to keep cancer cells from getting the hormones they need to grow. This treatment may include the use of drugs that change the way hormones work which are usually given by month. The ovaries produce female hormones which may stimulate growth of the cancer cells, thus radiation to the ovaries or surgery to remove the ovaries may be involved to stop the production of such hormones.

3. Newer Therapy

As medical research is constantly ongoing, new therapies may be made available in the fight against breast cancer. However, not everyone is suited to receive these new therapies. Your doctor will discuss with you the most suitable therapy based on your cancer type and character.

What Happens at the Hospital?

Below is the outline of the care you will receive if you are going for breast cancer operation.

In the Specialist Clinic

- Your doctor will obtain your medical history and explain to you the nature of your operation and its complications.
- Blood tests may be done to ensure that you are fit for the surgery.
- The following may also be done:
Electrocardiogram (ECG) and Chest X-ray.
- The nurse will brief you on your estimated period of stay in the hospital and the estimated bill size.
- The nurse will inform you not to eat or drink (usually after 12 midnight the night before the surgery).
- The nurse will provide you with the following information:
 - What to expect when you are in the operating theatre.
 - What to expect when you wake up from your operation.

On the Day of Admission/Operation

For physically Fit Patients

- The nurse will help you settle in the ward and will check your weight, temperature, pulse, respiration rate and blood pressure.
- Blood test may be done to ensure that you are fit for the surgery if these were not already done in the clinic.

On the Day of the Operation

Before the Surgery

- You are reminded not to take any food or drinks.
- Take a shower before your operation.
- Hand over any valuables to the nurse for safekeeping before the operation.
- You will be asked to wear an operating gown before going to the operating theatre.
- The nurse will transfer you from the bed to a trolley and accompany you to the operating theatre.

At the Operating Theatre

- You may request for additional blankets if you feel cold.
- The anaesthetist will assess your fitness for surgery.

After the Surgery

- You will be closely monitored in the ward.
- 1-2 tubes may be inserted near the operated site during the surgery to drain any excess blood or body fluids for a period of about 2 weeks.
- You may vomit after the operation due to the side effects of the anaesthesia or feel some pain at the operation site. If you experience this, inform your nurse. She may give you an injection to make you feel more comfortable.
- You need to stay in bed for at least 6 hours after the operation for the anaesthesia to wear off. However, if you feel well, you are encouraged to sit up.
- You will be given a drink or food according to your doctor's instructions.

Day after Operation

- You will feel some restriction in movement on the operated side.
- The breast care nurse or physiotherapist will teach you arm exercises to help you regain movement and strength in your arm and shoulder on the operated side.

Day of Discharge

- Your doctor will review you and discharge you if you are well.
- The doctor will prescribe medication that you need. The pharmacist will instruct you on how to take the medication.
- Your nurse will give you a discharge letter, medical certificate and an appointment to see your surgeon at the Breast Centre.

Note:

The average length of hospital stay for wide excision or mastectomy is 1-2 days but may be longer if reconstruction is involved. You may even go home with the drains if you are well. The nurse will teach you how to take care of it. The nurse will review you at the Breast Centre to determine when they can be removed.

Healing after Surgery

Hand and Arm Care

You should be able to regain your strength and mobility of your arm and shoulder. You should be able to perform your usual activities, e.g. housework, recreational sports and travelling. Slight swelling of the arm, or lymphoedema, may occur in less than 10% of patients. If this happens, it is usually mild and can be controlled.

Some measures that you can take include:

- Protect yourself from insect bites especially after gardening.
- Manicure carefully. Avoid cutting or tearing cuticles. Cuticles can be kept soft with a lanolin-based cream.
- Care for simple cuts, scratches or burns by meticulous washing. Seek medical attention early if there are signs of infection.
- Inform medical staff about your surgery. They should minimise using the affected arm for measuring blood pressure, administering injections or performing blood tests.
- If you notice any swelling in your arm, inform your doctor.

Breast Prosthesis

After a mastectomy, some women may decide to wear a breast form, also known as prosthesis. Without a prosthesis you may try to cover the area up by stooping your shoulders. Poor posture will eventually result in problems with your spine. And clothes will neither fit nor look good. Secondly, since the weight of the breast is no longer present, your body is off balance. And this will cause problems with the curvature of your spine. Lastly, you may have problems maintaining balance. It is important that the prosthesis must not only look good but also be of the same size and weight as your breast.

Diet and Nutrition

Nutrition plays an important role in determining the outcome after any operation. It is important that you have proper nutrition to nourish your body in order to recover quickly. You may resume your normal diet as soon as you feel ready. Always eat a normal well-balanced diet with adequate fruits and vegetables and drink enough fluids. Remember to eat a wide variety of foods. For those with a poor appetite, try to have small frequent meals throughout the day. Taking a light snack or nourishing drink every three hours is a good way to start. There is no scientific basis to avoid certain types of food like seafood or soya sauce. Your condition is not contagious and so it is safe for you to share your food and utensils with your family and loved ones.

Health Supplements

Eating a healthy well balanced diet ensures that you get the necessary vitamins and minerals needed for your recovery and general well being. However if you have any problems with your diet or appetite, taking a low dose comprehensive multivitamin supplement is advisable as this is needed for wound healing, immunity and many other bodily functions. Herbal preparations have not been scientifically shown to be of benefit and should be taken with caution.

Exercises after Breast Surgery

Why Exercise?

Exercising is very important. It will help you to reduce pain and stiffness, regain motion and strength in your arm and shoulder as well as prevent lymphoedema.

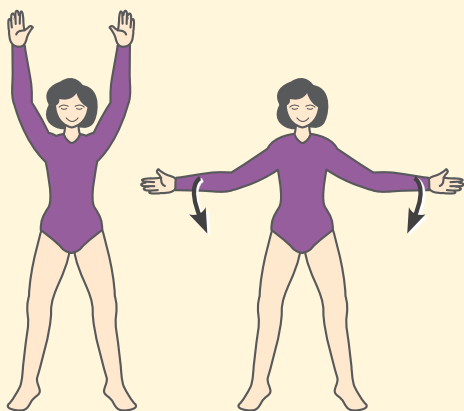
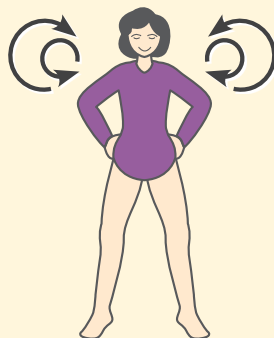
Carefully planned exercise should be started as soon as the doctor says you are ready, usually within a day or so after surgery. It should begin slowly and gently, gradually becoming more active as you recover.

When to Exercise?

You can and should start stretching exercises on the first day after your operation. The sooner you start exercising, the faster you will regain your shoulder and arm range of motion. You will also prevent the onset of stiffness, swelling and tightness and promote physical and emotional healing.

Shoulder Rolls

1. Sit or stand, with neck straight and shoulder relaxed, hands on hips.
2. Roll both shoulders forward slowly in big circles, repeat 10 times.
3. Roll both shoulders backwards slowly 10 times.

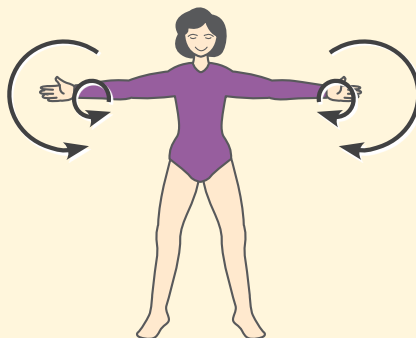


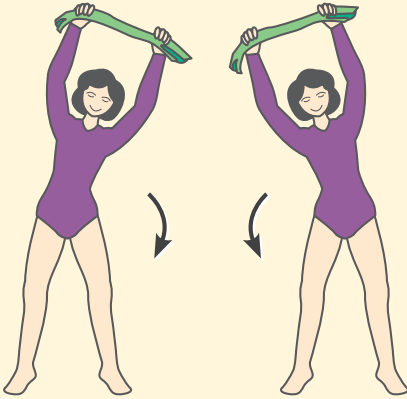
Arm Lifts

1. Stand up straight, feet and shoulder width apart, shoulders relaxed.
2. Raise your arms from the side up and over the head keeping elbows straight.
3. Lower arms slowly.

Arm Circling

1. Stand up straight, feet and shoulder width apart, shoulders relaxed.
2. Raise your arms out to the sides at shoulder height.
3. Rotate the arms forward slowly in small circles, gradually making bigger circles.
4. Repeat rotating the arms backwards.



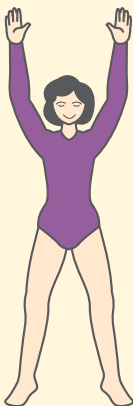
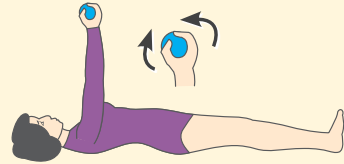


Bar Lifts

1. Sit or stand up, with neck straight and shoulders relaxed.
2. Hold a towel in front of your body, shoulder width apart.
3. Raise it above your head.
4. Stretch to your left then to your right.

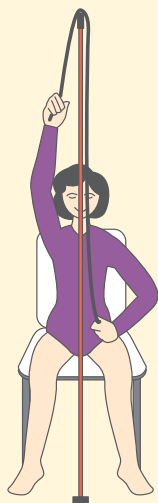
Ball Squeezing

1. Lie in bed and hold a rubber ball in your hand.
2. Lift arm straight up and alternately squeeze and relax the ball.
3. Do this exercise as recommended.



Wall Climb

1. Stand up straight, feet and shoulder width apart, shoulders relaxed, facing the wall.
2. Place both hands on the wall, with hands at eye level.
3. Slowly walk your fingers up the wall as high as possible.
4. Hold for a few seconds then walk the fingers down the wall.
5. Repeat 10 times reaching a little higher with each repetition.

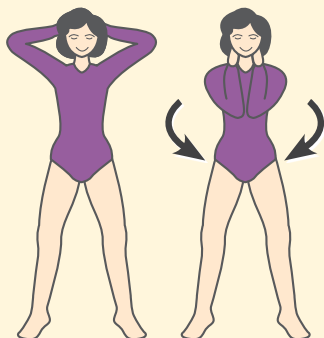


Pulley Motion

1. Place knots at each end of a nylon cord. Toss it over the top of the door with the unaffected arm.
2. Sit with legs hugging both sides of the door closely and keep soles firmly planted on the floor.
3. Pull the cord up and down with both arms.

Back Scratcher

1. Bend elbow of affected arm and place back of hand on the small of the back. Gradually work your way up until your fingers reach the opposite shoulder blade.



Elbow Pull-in

1. Bend elbows, clasping fingers to the back of your neck.
2. Pull elbows in towards each other until they touch.

Learning to Cope with Feelings

Having breast cancer can be a distressing experience for a woman. She can be confronted not only with the physical aspect of recovery but with feelings of rejection, fears of losing sexual attractiveness, and a drastically altered body image. But given time and the support of family and friends, women who have had breast surgery find that they can lead happy, active and fulfilling lives.

Coming to terms with breast cancer must include a period of mourning for the breast. If you are angry, sad or frightened – remember that you are not alone. These are natural, honest emotions that people can experience in times of stress.

Learn to cope with this stressful period by talking to someone and setting realistic goals, which you can achieve. Concentrate on your healing, which will help you to regain your confidence.

Losing your breast or part of it does not make you a lesser person. Your friends and family care for you because of who you are and not what you are.

Meeting and talking to other women who have had breast cancer and are now leading full and happy lives is also a great help. It will encourage you to know that you are not alone and that you too can overcome your fears and anxieties. You can get help from our hospital's Breast Cancer Support Group through our breast care nurses, or you can approach the Breast Cancer Foundation or the Singapore Cancer Society.

Frequently Asked Questions

1 What are the Risks of Having a Mastectomy?

As with any surgery, there are possible risks. These include:

- Healing problems, such as infection and bleeding.
- Stiffness of the shoulder.
- Numbness - some numbness in the skin at the operated site and in the armpit will usually occur after a mastectomy and axillary clearance.
- Seroma - fluid accumulates under the arm and under the wound which can easily be drained with a needle at the specialist clinic.
- Lymphedema is a long-term slight swelling of the arm which may occur in 10-20% of patients.
- Skin necrosis - occasionally part of the skin edges may heal poorly and become wet. However, the wound will heal with regular dressing and wound care.

2 I had a mastectomy done. Is it possible for me to have cancer of the other breast?

Yes. Regular screenings and mammograms will be done for the other breast during your follow-up visits to the doctor. Do monthly breast self examinations. Check both sides, tell your doctor if you notice changes from month to month.

3 What should I do if I experience stiffness, pain, swelling over my operated arm and fever for 3 days?

You should consult a doctor as soon as possible.

4 Where can I obtain a breast prosthesis?

The prosthesis can be obtained from the Breast Centre, CGH and CGH Retail Pharmacy.

5 Where can I join a Breast Cancer Support Group?

Breast Cancer Support Groups:

- a) CGH Breast Support Groups
- b) Breast Cancer Foundation
- c) Singapore Cancer Society

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For appointments and enquiries,
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Tel: (65) 6850 3333

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